

AMENDMENT TO THE CLAIMS

Kindly amend the claims as follows:

1. (Currently Amended) Rubber mixtures comprising uncrosslinked, double-bond-containing rubbers (A), crosslinked rubber particles (B), multifunctional isocyanates (C), and a crosslinking agent wherein the amount of component (B) in the mixture is from 1 to 150 parts by weight and the amount of multifunctional isocyanates (C) is from 1 to 100 parts by weight, in each case based on 100 parts by weight (phr) of the rubber component (A) and wherein said crosslinked rubber particles (B) have particle diameters of from 5 to 1000 nm and swelling indices in toluene of from 1 to 15 and wherein the gel content of the rubber particles (B) is from 80 to 100 wt.%.

2. (Original) Rubber mixtures according to Claim 1, wherein said crosslinked rubber particles (B) are present in from 5 to 100 parts by weight and said multifunctional isocyanates (C) are present in from 3 to 50 parts by weight, in each case based on 100 parts by weight of the rubber component (A).

3. Cancelled.

4. (Original) Rubber mixtures according to Claim 1, wherein said multifunctional isocyanates (C) contain isocyanates having at least two isocyanate groups in the molecule.

5. (Original) Rubber mixtures according to Claim 4, wherein said multifunctional isocyanates (C) are selected from the group consisting of hexamethylene diisocyanate, 1-isocyanato-3-(isocyanatomethyl)-3,5,5-trimethylcyclohexane, 2,4- and 2,6-diisocyanatotoluene as well as the corresponding technical isomeric mixture, diphenylmethane diisocyanates, diphenylmethane 4,4'-diisocyanate, diphenylmethane 2,4'-diisocyanate, diphenylmethane 2,2'-diisocyanate as well as the corresponding

technical isomeric mixtures, naphthalene 1,5-diisocyanate and 4,4',4"-triisocyanatotriphenylmethane.

6. (Previously Presented) Rubber mixtures according to Claim 1, wherein said uncrosslinked, double-bond-containing rubbers (A) are selected from the group consisting of natural rubber, styrene/butadiene rubber, polybutadiene rubber, nitrile rubber, butyl rubber, brominated isobutylene/isoprene copolymers having bromine contents of from 0.1 to 10 wt.% based on 100 wt.% of said brominated isobutylene/isoprene copolymer, chlorinated isobutylene/isoprene copolymers having chlorine contents of from 0.1 to 10 wt.% based on 100 wt.% of said chlorinated isobutylene/isoprene copolymer, hydrogenated or partially hydrogenated nitrile rubber, styrene/butadiene/acrylonitrile rubber, polychloroprene, epoxidized natural rubber or mixtures thereof, carboxylated nitrile rubbers and carboxylated styrene/butadiene copolymers.

7. (Previously Presented) Rubber mixtures according to Claim 1, wherein said crosslinked rubber particles (B) include those which have been obtained by crosslinking of the following rubbers: polybutadiene, butadiene/acrylic acid C₁₋₄-alkyl ester copolymers, polyisoprene, styrene/butadiene copolymers having styrene contents of from 1 to 60 wt.%, based on 100 wt.% of the styrene/butadiene copolymer, carboxylated styrene/butadiene copolymers, fluorine rubber, acrylate rubber, polybutadiene/acrylonitrile copolymers having acrylonitrile contents of from 5 to 60 wt.% based on 100 wt.% of the polybutadiene/acrylonitrile copolymer, carboxylated nitrile rubbers, polychloroprene, isobutylene/isoprene copolymers having isoprene contents of from 0.5 to 10 wt.% based on 100 wt.% of the isobutylene/isoprene copolymers, brominated isobutylene/isoprene copolymers having bromine contents of from 0.1 to 10 wt.% based on 100 wt.% of the brominated isobutylene/isoprene copolymers, chlorinated isobutylene/isoprene copolymers having chlorine contents of from 0.1 to 10 wt.% based on 100 wt.% of the chlorinated isobutylene/isoprene copolymers, partially and completely

hydrogenated nitrile rubbers, ethylene/propylene/diene copolymers, ethylene/acrylate copolymers, ethylene/vinyl acetate copolymers, epichlorohydrin rubbers, silicone rubbers, polyester urethane polymers and polyether urethane polymers.

8. (Currently Amended) A rubber vulcanate comprising rubber mixtures, ~~which comprise uncrosslinked, double bond containing rubbers (A), crosslinked rubber particles (B), multifunctional isocyanates (C), and a vulcanizing agent wherein the amount of component (B) in the mixture is from 1 to 150 parts by weight and the amount of multifunctional isocyanates (C) is from 1 to 100 parts by weight, in each case based on 100 parts by weight (phr) of the rubber component (A) and wherein said crosslinked rubber particles (B) have particle diameters of from 5 to 1000 nm and swelling indices in toluene of from 1 to 15 and wherein the gel content of the rubber particles (B) is from 80 to 100 wt.%, according to Claim 1.~~

9. (Currently Amended) Molded rubber bodies comprising rubber mixtures, ~~which comprise uncrosslinked, double bond containing rubbers (A), crosslinked rubber particles (B), multifunctional isocyanates (C) and a vulcanizing agent wherein the amount of component (B) in the mixture is from 1 to 150 parts by weight and the amount of multifunctional isocyanates (C) is from 1 to 100 parts by weight, in each case based on 100 parts by weight (phr) of the rubber component (A) and wherein said crosslinked rubber particles (B) have particle diameters of from 5 to 1000 nm and swelling indices in toluene of from 1 to 15 and wherein the gel content of the rubber particles (B) is from 80 to 100 wt.%, according to Claim 1.~~

10. (Original) A molded rubber body according to Claim 9, wherein said molded rubber body is selected from the group consisting of cable sheaths, hoses, drive belts, conveyor belts, roller coverings, tire components, shoe soles, gaskets, damping elements and membranes.

11-14. Cancelled.

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1. (Previously Presented) A rubber mixture according to Claim 7, wherein said styrene/butadiene copolymers have styrene contents of from 5 to 50 wt.% based on 100 wt.% of said styrene/butadiene copolymer.

16-19. (Cancelled).

20. (Previously Presented) A rubber mixture according to Claim 1, wherein the crosslinked rubber particle(s) comprises functional groups that are capable of reacting with isocyanates.

21. (Previously Presented) A rubber mixture according to Claim 20, wherein said crosslinked rubber particle(s) has been functionalized with hydroxyl, carboxyl, amino and/or amide groups.

22. (New) A rubber mixture according to Claim 1, wherein the crosslinking agent is selected from the group consisting of sulfur, sulfur donors, peroxides, diisopropenylbenzene, divinylbenzene, divinyl ether, divinylsulfone, diallyl phthalate, triallyl cyanurate, triallyl isocyanurate, 1,2-polybutadiene, N,N'-m-phenylene maleimide, triallyl trimellitate, acrylates, methacrylates of polyhydric, C₂- to C₁₀ alcohols, polyethylene glycol having from 2 to 20 oxyethylene units, neopentyl glycol, bisphenol A, glycerol, trimethylpropane, pentaerythritol, sorbitol with unsaturated polyesters of aliphatic diols and polyols.